

United States Patent and Trademark Office



UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231 www.uspto.gov

DATE MAILED: 09/20/2002

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/806,203	06/19/2001	Honchin En	Q63594	3753	
7	2590 09/20/2002				
Sughrue Mion Zinn Macpeak & Seas			EXAMINER		
2100 Pennsylvania Avenue N W Suite 800 Washington, DC 20037-3213		800	ALCALA	ALCALA, JOSE H	
			ART UNIT	PAPER NUMBER	
			2827		

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)			
	09/806,203	EN ET AL.			
Öffice Action Summary	Examiner	Art Unit			
	Jose H Alcala	2827			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailling date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status					
1) Responsive to communication(s) filed on					
	is action is non-final.				
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims					
4)⊠ Claim(s) 1-63 is/are pending in the application.					
4a) Of the above claim(s) is/are withdrawn from consideration.					
5)☐ Claim(s) is/are allowed.					
6) ☐ Claim(s) is/are rejected.					
7) Claim(s) is/are objected to.					
8) Claim(s) <u>1-63</u> are subject to restriction and/or e	election requirement.				
Application Papers					
9)☐ The specification is objected to by the Examiner.					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).					
11) The proposed drawing correction filed on		roved by the Examiner.			
If approved, corrected drawings are required in reply to this Office action.					
12) The oath or declaration is objected to by the Examiner.					
Priority under 35 U.S.C. §§ 119 and 120					
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).					
a) ☐ All b) ☐ Some * c) ☐ None of:					
1. Certified copies of the priority documents have been received.					
2. Certified copies of the priority documents have been received in Application No					
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.					
14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).					
a) ☐ The translation of the foreign language provisional application has been received. 15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.					
Attachment(s)					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper No(s)	5) Notice of Informa	ary (PTO-413) Paper No(s) al Patent Application (PTO-152)			

Application/Control Number: 09/806,203

Art Unit: 2827

DETAILED ACTION

Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-14, 17-20, 25-32,33-36, 54-59, 62-63, drawn to a printed circuit board, classified in class 174, subclass 256.
 - II. Claims 15,16,21-24,37-53, 60-61 drawn to a method of making a printed circuit board, classified in class 29, subclass 825.
- 2. The inventions are distinct, each from the other because of the following reasons: Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different process, such as: a) instead of using press lamination, the film comprising cycloolefin resin can be preformed and adhered to the conductor with the use of a thin adhesive layer, b) the board can be made without cleaning the surface of metal layer with our acid, c) instead of etching the conductor layer, the material that is not needed can be removed with a cutting device, and d) the conductor circuit can be formed having the openings already in it, and then proceeding to roughening the surface.

Application/Control Number: 09/806,203

Art Unit: 2827

- 3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.
- 4. Because these inventions are distinct for the reasons given above and the search required for Group II is not required for Group I, restriction for examination purposes as indicated is proper.

5. If group I is elected:

- 6. This application contains claims directed to the following patentably distinct species of the claimed invention:
 - Species 1: Embodiment of Figures 1-3
 - Species 2: Embodiment of Figures 4-8
 - Species 3: Embodiment of Figures 9-13
 - Species 4: Embodiment of Figures 14-18
 - Species 5: Embodiment of Figures 19-22
 - Species 6: Embodiment of Figures 23-25
 - Species 7: Embodiment of Figures 26
 - Species 8: Embodiment of Figures 27
 - Species 9: Embodiment of Figures 28
 - Species 10: Embodiment of Figures 29-32
 - Species 11: Embodiment of Figures 33-37
 - Species 12: Embodiment of Figures 38-43
 - Species 13: Embodiment of Figures 44-49

Application/Control Number: 09/806,203 Page 4
Art Unit: 2827

7. Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic.

- 8. Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.
- 9. Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).
- 10. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.
- 11. Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Application/Control Number: 09/806,203

Art Unit: 2827

12. Applicant is reminded that upon the cancellation of claims to a non-elected

invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one

or more of the currently named inventors is no longer an inventor of at least one claim

remaining in the application. Any amendment of inventorship must be accompanied by

a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

13. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jose H Alcala whose telephone number is (703) 305-

9844. The examiner can normally be reached on Monday to Friday.

14. If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, David Talbott can be reached on (703) 305-9883. The fax phone numbers

for the organization where this application or proceeding is assigned are (703) 305-3431

for regular communications and (703) 305-3431 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is (703) 308-

0956.

JHA

September 17, 2002

MIN Calmact 8-02

Page 5

PRIMARY EXAMINER